

Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of claims in the application:

Claims 1-21 (canceled)

Claim 22 (previously presented): A chemical vapor deposition system according to Claim 49 wherein said reaction vessel is made of quartz.

Claim 23 (canceled)

Claim 24 (previously presented): A chemical vapor deposition system according to Claim 49 wherein said source of electromagnetic radiation comprises an induction coil surrounding said reaction vessel.

Claims 25-48 (canceled)

Claim 49 (currently amended): A chemical vapor deposition system consisting essentially of:

a reaction vessel formed of a material substantially transparent to electromagnetic radiation;

a gas supply system in fluid communication with said reaction vessel;

a source of electromagnetic radiation external to and spaced apart from said reaction vessel; ~~and~~

a water inlet for introducing water into a space between said reaction vessel and said source of electromagnetic radiation to form a water jacket to circulate water against an outer surface of said reaction vessel; and

a susceptor within said reaction vessel, said susceptor formed of a material that is thermally responsive to electromagnetic radiation, wherein said susceptor is defined by a plurality of straight sidewall sections, each section having a planar surface, with said sidewall sections connected at adjacent sides, to form a hollow inverted truncated cone with a plurality of wafer pockets on the inner circumference of said truncated cone, and wherein the spacing between facing sidewall sections is unobstructed and so dimensioned that said facing sidewall sections radiantly and directly heat the exposed surface of a facing substrate wafer to substantially the same temperature as said susceptor portion heats a substrate wafer that is in one of said wafer pockets to thereby minimize or substantially eliminate radial and axial temperature gradients across a substrate wafer.

Claim 50 (previously presented): A chemical vapor deposition system according to Claim 49 wherein said susceptor is formed from graphite coated with silicon carbide.